Local Work Instruction:
Transocean Polar Pioneer: Fire Control System Test Water Discharge – D008

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Scope:		**Revised By:**	D. Johnson
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SCOPE:

This document offers work level instructions for the sampling, testing, and reporting associated with the discharge of fire system test water while operating under the guidelines of the NPDES General Permit (AKG-28-8100), on-board the Transocean *Polar Pioneer*. The fire control test system consists of untreated seawater released during the training of personnel in fire protection and the testing and maintenance of fire protection equipment. Effluent goes directly overboard for discharge. No biocides or chemicals will be added to this system.

RESPONSIBILITY:

The M-I SWACO NPDES Compliance Specialist is responsible for ensuring that this LWI has been provided to each person involved with this task.

The M-I SWACO NPDES Compliance Specialist is responsible to ensure that this LWI has been provided to each person prior to conducting this task. Any personnel that may perform the tasks outlined in this document must be familiar with the process, before the rig begins operating under NPDES regulations.

During active drilling operations, the M-I SWACO NPDES Compliance Specialist is responsible for performing the following tasks per discharge:

- Estimate flow volume.
- Perform and document visual sheen tests.
- If visual sheen tests cannot be performed, collect and document samples for static sheen tests.
- Four times per well, at intervals designated to be representative of the discharge's toxicity, a sample will be collected for initial toxicity screening. Each sample will be collected at a time period selected to reflect discharge processes and operational processes. Collect and document initial toxicity screening samples.
- WET testing will be required if either of the following occurs: 1) Initial rapid toxicity screening threshold criteria are exceeded OR 2) discharge exceeds 10,000 gallons during any 24-hr period and chemicals are added to the system. If WET testing is required, collect and document samples. Immediately transfer the samples to the sample refrigerator for storage awaiting packaging for transportation to the fixed analytical laboratory. Package samples for transport to the fixed analytical laboratory.
- Collect and document samples for pH analysis.

1.0 References:

1.0 NPDES GP AKG-28-8100:

1.0.1 Table 9 – *Effluent Limitations and Monitoring Requirements for Fire Control System Test Water (D008).*

1.1 POL RSP 001 GEN Energy Isolations - HSE (2) Lock out / Tag out policies and procedures.

1.2 Transocean Standard Operating Procedure for Fire Control System Test Water

1.3 Transocean Barge Engineer Test Log.

1.4 Transocean Permit to Work for Fire Control System Testing.

1.5 Transocean Rig Specific Procedure for Fire Control System Testing.

1.6 Polar Pioneer Best Management Practices Plan, April 2015.

1.7 Polar Pioneer Quality Assurance Project Plan, April 2015.

1.8 M-I SWACO (or Misc.) Standard Operating Procedures: 1006, 2001, 2012, 2003, 2008, 3004, ENV001.01, TOX045.02, TOX002.05, TOX012.06, TOX014B.02, TOX043.06

1.9 Shell Exploration & Production Company Alaska Venture 2015 Polar Pioneer Waste Management Plan.

2.0 General Requirements:

2.0 The M-I SWACO NPDES Compliance Specialist is responsible for sampling, testing, and reporting to the Shell Environmental Department all effluent discharge permit conditions while operating under the requirements of the NPDES GP AKG-28-8100.

2.1 Shell Environmental Department is responsible for maintaining the Discharge Monitoring Report (netDMR) and submitting to EPA all discharges sampling, testing and results on a monthly basis.

2.2 Transocean is responsible for operating and repairing all equipment associated with this discharge.

2.3 A Transocean Permit to Work must be completed and signed by the Offshore Installation Manager or designee prior to discharging any effluent regulated by this LWI.

3.0 Safety Guidelines:

3.0 Before any operations can take place, all personnel involved in this process must complete the following details if required by operator or contractor:

3.0.1 The Pre-Tour Meeting is when daily activities are discussed.

3.0.2 Written Risk Assessment with all involved parties present.

3.0.3 After action review of Risk Assessment.

3.0.4 Transocean Permit to Work.

4.0 Discharge/Task Description:

4.0 Transocean personnel test the fire control systems onboard the Transocean *Polar Pioneer*.

4.1 The seawater originates in the forward of both the starboard and port pontoons. Fire control water is supplied from sea chests located in each Pontoon through suction fire pumps which charge the system. The test water is discharged directly overboard through fire water discharge points.

4.2 Since Transocean randomly selects the fire water discharge point, Transocean will alert the M-I SWACO NPDES Compliance Specialist prior to the test to confirm time, date, and location.

4.3

Effluent Parameter	Effluent Limitations		Monitoring Requirements	
	Average Monthly Limit	Maximum Daily Limit	Sample Frequency	Sample Type
pH	Report (s.u.)		Monthly	Grab
Free oil	No discharge note 1,2		Once/discharge	Visual/Grab
Total Volume	Report (gal)		Monthly	Estimate
WET	Report (TU_c)		Use rapid toxicity test 4X/well as initial screen. If test passes, WET not required.	Collect grab sample for analysis if results show potential toxicity or 1X/well if discharge >10,000 gal during 24 hr and if chemicals are added to the system.

Samples will be collected directly from the fire main or fire hose.

Once per discharge event, the M-I SWACO NPDES Compliance Specialist will conduct a visual sheen test. The observations and time of day are to be recorded in the NPDES Master Spreadsheet.

4.4 If visual observations of the discharge are not possible, the permittee must sample (grab sample) the fire control system test discharge and test for sheen using the static sheen test.

4.5 The M-I SWACO NPDES Compliance Specialist will immediately report to Shell Environmental Department, at 907-830-7435, of any upset condition.

5.0 Sampling Requirements for Fire Control System Test Water (D008):

6.0 Clean-up:

6.0 Follow housekeeping practices.

7.0 Contingency:

7.0 Notify the Transocean Marine Department staff if any equipment is not working properly.

Revision Log:

Date:	Document History:	Revised/reviewed by:	Location: